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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,553	03/06/2007	Thomas Retzbach	26202.500	4961

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EXAMINER

SALONE, BAYAN

ART UNIT	PAPER NUMBER
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3726

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,553	Applicant(s) RETZBACH, THOMAS	
	Examiner BAYAN SALONE	Art Unit 4151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05/08/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>03/06/2007</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 7 is objected to because of the following informalities: Claim 7, line 2 recites "roduced" which appears to be a misspelling of the word "produced".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 2 recites the broad recitation in particular a maximum width of 0.5 mm, and the claim also recites a maximum width of 0.35 mm which is the narrower statement of the range/limitation. Likewise, claim 3 recites the broad recitation in particular a maximum width of 0.35 mm,

Art Unit: 4151

and the claim also recites a maximum width of 0.3 mm which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haimer (US Patent No. 7,182,558) in view of Blackburn (US Patent No. 6,479,782).

In light of the specification the use of the term “maximum width” has been interpreted as a width less than or up to, for the purposes of the art rejection below.

Regarding Claim 1, Haimer discloses an intermediary bushing (51) to be inserted into the central receptacle of a chuck with a cylindrical body (3) which has a central clamp hole (53) in the form of a through hole, the body (3) having several radial slots (61) distributed along its outer circumference which extend over the whole axial length of the intermediary bushing (51), (Col. 10, Lines 40-51) characterized in that the slots have a maximum width of 0.3 mm (Col. 10, Line 53) which reads on the claimed range, and that over its whole length the body has a through slot extending from its outer circumference to the inner circumference with a maximum width of 0.3 mm (Col. 10,

Art Unit: 4151

Lines 40-53, Note an equivalent configuration where the slots extend to the outer diameter of the bushing is shown in the embodiment of Figs. 11 and 12).

Haimer does not disclose that the outer contour, the slots and the clamp hole of the intermediary bushing are spark-eroded.

For the purpose of the rejection above Blackburn is in the same field of endeavor of spring loaded holding tools and discloses an electrical discharge machining method for fabricating elements of the flexure block, for the benefit of eliminating machining steps and reducing variability of the product's properties (Col. 2, Lines 57-63). It is common knowledge to those of ordinary skill in the art that electrical discharge machining is a synonymous term for spark erosion. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosure of Blackburn with the disclosure of Haimer to spark erode the slots of the bushing and central clamp hole of the chuck, for the benefit of eliminating machining steps and reducing variability of the product's properties.

Regarding Claim 6, Haimer discloses a an intermediary bushing (51) to be inserted into the receptacle of a chuck with a cylindrical body (3) which has a central clamp hole (53) in the form of a through hole, several radial slits being provided, distributed along the outer circumference of the cylindrical body (3) and which extend over the whole axial length of the intermediary bushing (51), characterized in that over its whole length the body (3) has a through slit (61) extending from its outer circumference to the inner circumference (Col. 10, Lines 40-51), the outer contour, the central clamp hole (53) and the slots (61) and/or the through slot (61) being produced with a maximum width of 0.3 mm (Col. 10, Lines 40-53, Note an equivalent configuration where the slots extend to the outer diameter of the bushing is shown in the embodiment of Figs. 11 and 12).

Haimer does not disclose a method for producing by means of an electrical discharge machining process in a single machine clamping.

Art Unit: 4151

For the purpose of the rejection above Blackburn is in the same field of endeavor of spring loaded holding tools and discloses an electrical discharge machining method for fabricating elements of the flexure block, for the benefit of eliminating machining steps and reducing variability of the product's properties (Col. 2, Lines 57-63). It is common knowledge to those of ordinary skill in the art that electrical discharge machining is a synonymous term for spark erosion. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosure of Blackburn with the disclosure of Haimer to spark erode the slots of the bushing and central clamp hole of the chuck, for the benefit of eliminating machining steps and reducing variability of the product's properties.

Regarding Claim 7, the aforementioned art combination of Haimer and Blackburn as applied to claim 6 remains as previously applied. Haimer further discloses a characterized in that the slots (61) are produced with a maximum width of 0.3 mm (Col. 10, Line 53).

3. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haimer (US Patent No. 7,182,558) in view of Blackburn (US Patent No. 6,479,782), in further view of Ronen et al (US Patent No. 5,028,178).

Regarding Claim 4, the aforementioned art combination of Haimer and Blackburn as applied to claim 1 remains as previously applied. The aforementioned art combination discloses a chuck with a chuck body (3) in which a central receptacle is formed for the shaft of a tool to be clamped, an intermediary bushing (51) being inserted into the receptacle, characterized in that the intermediary bushing (51) is formed according to Claim 1.

The aforementioned art combination of Haimer and Blackburn does not disclose a coolant supply duct which extends between the end of the chuck body on the machine

Art Unit: 4151

side and the receptacle, so as to supply the end of a tool pushed into the receptacle on the machine side with a coolant.

For the purpose of the rejection above Ronen is in the same field of endeavor of spring loaded holding tools and discloses a coolant supply duct which extends between the end of the chuck body on the machine side and the receptacle, so as to supply the end of a tool pushed into the receptacle on the machine side with a coolant, for the benefit providing a more effective method of directing coolant through the chuck to the hind of the working tool (Col. 2, Lines 48-51). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosure of Ronen with the disclosures of Blackburn and Haimer to provide a coolant supply duct which extends between the end of the chuck body on the machine side and the receptacle, for the benefit providing a more effective method of directing coolant through the chuck to the hind of the working tool.

Regarding Claim 5, the aforementioned art combination of Haimer, Blackburn and Ronen as applied to claim 4 remains as previously applied.

Ronen further discloses a sealing material (50) is inserted into the slots, for the benefit of firmly holding the end portions of the collet in place to prevent coolant leakage (Col. 3, Lines 1-10). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosure of Ronen with the disclosures of Blackburn and Haimer, for the benefit of providing a seal and firmly holding the end portions of the collet in place to prevent coolant leakage.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bayán Salone, whose telephone number is (571) 270-

Art Unit: 4151

7739. The examiner can normally be reached on M-F, 8am-5:00pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on (571) 272- 1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA).

/Bayán Salone/

/Angela Ortiz/

Supervisory Patent Examiner, Art Unit 4151